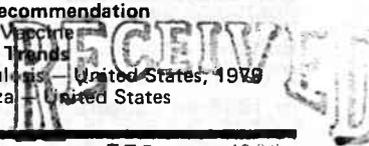


MNMR

MORBIDITY AND MORTALITY WEEKLY REPORT

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Epidemiologic Notes and Reports

FEB 28 1980

Type F Infant Botulism — New Mexico

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New Mexico has recently reported a type F infant botulism case. This is the first such case ever reported.

On December 24, 1979, a 14-day-old male infant from Acoma Pueblo, New Mexico, developed a weak cry and difficulty swallowing and within hours was noted by his parents to be cyanotic and dyspneic. Upon arriving at a hospital the same day, the infant was intubated and placed on a mechanical ventilator. In addition to respiratory failure, the infant displayed generalized muscle weakness, bilateral ptosis, poor head control, lack of bladder tone, and somnolence. His pupils reacted normally, and no extraocular muscle palsies were noted. The child's physician suspected infant botulism and submitted a stool specimen for culture and toxin assay on December 26. The infant required intermittent respiratory support until February 15. He has shown steady clinical improvement since then and is expected to be discharged from the hospital this week.

A mouse neutralization test for the presence of toxin, performed at the New Mexico Scientific Laboratory Division, demonstrated type F botulinal toxin in both stool extracts and enrichment cultures of stool specimens. The presence of type F botulinal toxin in an extract of the infant's feces was confirmed by the CDC Botulism Laboratory, and *C. botulinum* type F organisms were isolated at CDC from the infant's stool. The New Mexico state laboratory does not routinely use type F botulinal antitoxin when screening suspected infant botulism specimens because of the extremely rare occurrence of *C. botulinum* type F in specimens. However, when the laboratory mice, previously injected with an extract of the patient's stool, died after they received types A and B antitoxin but lived following receipt of polyvalent (A,B,C,D,E,F) antitoxin, specific tests for types C,D,E, and F botulinal toxin were performed.

The baby had been born in an ambulance on December 10. He weighed 5 lbs., 9½ oz. and was estimated to be 41 weeks gestational age. He developed pneumonitis secondary to meconium aspiration and was treated with parenteral ampicillin and kanamycin until his discharge from the hospital on December 18. The baby was exclusively fed commercial formula with iron.

An investigation to determine the source of the infant's infection has not been successful. A can of the infant formula bought at the same time and location as that which the baby consumed while at home showed no evidence of contamination. A stool sample collected from the child's mother on January 14 was negative for type F organisms and spores as were soil samples from house plants inside and dirt outside the baby's home and his grandmother's house.

Reported by D Davis, MD, L DeLaTorre, MD, A Kazemier, RN, Presbyterian Hospital, Albuquerque; R Snyder, MD, Dept of Neurology, University of New Mexico; T Chavez, BS, Indian Health Service; B Pincomb, MS, J Hall, MS, M Skeels, PhD, Scientific Laboratory Div, C Woolfolk, MS, R Madson,

Botulism – Continued

MS, Environmental Improvement Div, RE Hoffman, MD, Acting State Epidemiologist, M Burkhart, MPH, Director, Health Services Div, New Mexico State Health and Environment Dept; Anaerobe Sect, Enterobacteriology Br, Bacteriology Div, Bur of Laboratories, and Enteric Diseases Br, Bacterial Diseases Div, Bur of Epidemiology, CDC.

Editorial Note: *C. botulinum* type F has been identified as causing human disease in only 2 outbreaks, both classic adult foodborne botulism. The first type F outbreak occurred in 1958 on Langeland, a Danish island, when 4 persons developed botulism after eating home-made liver paté (1); the other documented outbreak occurred in California in 1966, when 3 persons developed signs and symptoms of botulism after eating home-prepared venison jerky (2,3). Type F *C. botulinum* has, however, been isolated from a variety of environmental sources, including soil samples (4), marine sediments (5), and seafood (6).

In this case, the source of the type F *C. botulinum* spores is unknown. Despite negative environmental cultures, it is possible that spores were present in dust or soil in the infant's home. As infant botulism is felt to result from toxin absorbed after multiplication of *C. botulinum* in the intestine, the child's early therapy with broad-spectrum parenteral antibiotics may have influenced multiplication of the organism by altering the normal intestinal microbiologic environment (7).

References

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5. Edlund MW, Poysky FT, Wieler DT. Characteristics of *C. botulinum* type F isolated from the Pacific Coast of the United States. Appl Microbiol 1967;15:1316-26.
6. Wans BQ, Carroll BJ, Garrett ES, Reese GB. Survey of the U.S. Gulf Coast for the presence of *Clostridium botulinum*. Appl Microbiol 1967;15:629-36.
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Follow-up on Suspected Vaccine-Induced Rabies in Cats

A total of 5 cases of rabies in cats, possibly induced by modified live virus (MLV) rabies vaccines, have been reported to CDC since March 1979.

Two of the cases occurred in Georgia (1), 2 in Michigan, and 1 in Nebraska. No other terrestrial rabies cases in mammals had been reported in the area of the Georgia cases for over 20 years nor in the areas of the Nebraska and Michigan cases for over 3 years.

All 5 cats had been vaccinated with MLV vaccine containing the SAD* strain of rabies virus. Four of the cats had been inoculated with vaccine marketed by Jensen-Salsbery Laboratories (tradename, ERA), but in each case the vaccine was from a different lot; in the other case, the cat received vaccine produced by Philips-Roxane Inc. and marketed by Pitman-Moore Inc. (tradename, Rabvax).

Onset of clinical illness in the 5 cats occurred 13 to 17 days after vaccination, typically beginning with paralysis in the vaccinated rear leg and eventually ascending to quadriplegia. At least 4 of the animals were alert and continued to eat and drink throughout their clinical illness. Ages of the animals ranged from 1½ to 10 years. All had been previously vaccinated with rabies vaccine 1 year or more before the most recent vaccinations; earlier vaccination had been with the same or other MLV vaccines or with inactivated vaccine.

*Street Alabama Dufferin.

Rabies — Continued

Four of the 5 cats were ill for at least 2 weeks. When killed for rabies testing, all 5 were confirmed rabid by fluorescent microscopy and/or mouse-inoculation tests.

The 2 companies distributing the incriminated SAD-strain vaccines have voluntarily withdrawn these vaccines from the market for use in cats.

Reported by the Veterinary Public Health Notes, December 1979, and the Respiratory and Special Pathogens Br, Viral Diseases Div, Bur of Epidemiology, CDC.

Editorial Note: The SAD strains of rabies vaccine are still accepted as safe and effective for immunization of those other species, including dogs, for which the vaccines have been approved.

Reference

1. MMWR 1979;28:274.

*Recommendation of the Immunization**Practices Advisory Committee (ACIP)***Mumps Vaccine**

This revised ACIP recommendation on mumps vaccine represents an updating of the 1977 recommendation, based on current knowledge and practice. Major changes include a clearer definition of individuals to be vaccinated, a definition of susceptibles, and a statement regarding the possible association of mumps and diabetes.

INTRODUCTION

Mumps is primarily a disease of young, school-age children; only about 15% of reported cases occur in adolescents and adults. It is generally self-limited, but it may be moderately debilitating. Benign meningeal signs appear in up to 15% of cases, but permanent sequelae are rare. Nerve deafness is one of the most serious of the rare complications involving the central nervous system (CNS).

Orchitis (usually unilateral) has been reported as a complication in up to 20% of clinical mumps cases in postpubertal males, although sterility is very rare. Symptomatic involvement of other glands and organs has been observed less frequently.

There are limited experimental, clinical, and epidemiologic data that pancreatic damage may result from injury caused by direct viral invasion. However, further research is indicated to determine whether mumps infection contributes to the pathogenesis of diabetes mellitus.

Naturally acquired mumps infection, including the estimated 30% of cases that are subclinical, confers durable immunity.

MUMPS VIRUS VACCINE

Live mumps virus vaccine* is prepared in chick-embryo cell culture. Since it was introduced in December 1967, more than 40 million doses have been distributed in the United States. The vaccine produces a subclinical, non-communicable infection with very few side effects.

Parotitis after vaccination has been reported rarely. Allergic reactions, including rash, pruritus, and purpura, have been associated temporally with mumps vaccination but are uncommon and usually mild and of brief duration. Very rarely, effects of CNS involvement, such as febrile seizures, unilateral nerve deafness, and encephalitis within 30 days of mumps vaccination, are reported. No deaths have been reported among patients with

*Official name: Mumps Virus Vaccine, Live.

Mumps Vaccine — Continued

such complications, and almost all have recovered completely. It should be emphasized that reports of nervous system illness following mumps vaccination do not necessarily connote an etiologic relationship between the illness and the vaccine. The frequency of CNS dysfunction following mumps vaccination is lower than the observed background incidence of CNS dysfunction in the normal population.

More than 90% of persons susceptible to mumps develop measurable antibody which, although of considerably lower titer than that following natural infection, is protective and long-lasting. The duration of vaccine-induced immunity is unknown, but observations over 12 years of vaccine use indicate both continuing protection against infection and the presence of antibody.

VACCINE USAGE

(See also the current ACIP statement, "General Recommendations on Immunization.")

General Recommendations

Susceptible children, adolescents, and adults should be vaccinated against mumps, unless vaccination is contraindicated. Persons can be considered susceptible to mumps unless they have documentation of 1) physician-diagnosed mumps or laboratory evidence of immunity, or 2) adequate immunization with live mumps virus vaccine when 12 or more months of age. Persons born before 1957 are likely to have been infected naturally and generally may be considered immune.

(Continued on page 93)

TABLE I. Summary — cases of specified notifiable diseases, United States
(Cumulative totals include revised and delayed reports through previous weeks.)

DISEASE	8th WEEK ENDING			CUMULATIVE, FIRST 8 WEEKS		
	February 23, 1980	February 24, 1979*	MEDIAN 1975-1979	February 23, 1980	February 24, 1979*	MEDIAN 1975-1979
Aseptic meningitis	58	42	38	486	398	302
Brucellosis	2	1	4	30	11	21
Chickenpox	4,864	6,654	6,084	35,735	43,808	40,925
Diphtheria	—	1	3	—	33	33
Encephalitis: Primary (arthropod-borne & unspec.)	11	14	14	90	75	94
Post-infectious	2	5	5	17	19	23
Hepatitis, Viral: Type B	242	256	256	2,190	1,923	1,987
Type A	433	676	676	3,825	4,617	5,087
Type unspecified	207	200	155	1,612	1,472	1,309
Malaria	22	10	6	175	66	39
Measles (rubeola)	165	305	622	1,085	1,737	2,668
Meningococcal infections: Total	48	73	55	414	506	310
Civilian	48	73	55	411	506	309
Military	—	—	—	3	—	3
Mumps	219	375	754	1,932	2,443	4,749
Pertussis	37	21	21	166	229	201
Rubella (German measles)	103	305	305	484	1,343	1,837
Tetanus	—	2	1	4	5	7
Tuberculosis	497	471	505	3,403	3,844	4,056
Tularemia	1	4	1	12	19	11
Typhoid fever	7	6	5	29	51	51
Typhus fever, tick-borne (Rky. Mt. spotted)	—	—	—	6	11	10
Venereal diseases:						
Gonorrhoea: Civilian	13,974	16,901	17,273	139,066	145,754	145,754
Military	427	480	480	4,050	4,179	4,347
Syphilis, primary & secondary: Civilian	453	433	459	3,908	3,674	3,674
Military	7	4	8	68	43	51
Rabies in animals	83	71	45	646	415	329

TABLE II. Notifiable diseases of low frequency, United States

	CUM. 1980		CUM. 1980
Anthrax	—	Poliomyelitis: Total	—
Botulism N.C. 1	4	Paralytic	—
Congenital rubella syndrome Fla. 1, Ky. 1, Calif. 1	11	Prionococci Mass. 1, Nev. 1, Calif. 1	13
Leprosy † Calif. 1	21	Rabies in man	—
Leptospirosis †	5	Trichinosis †	7
Plague	—	Typhus fever, flea-borne (endemic, murine)	2

* Delayed reports received for calendar year 1979 are used to update last year's weekly and cumulative totals.

† Delayed reports: Leprosy: Calif. +2 (1980); Leptospirosis: Ala. +1 (1979); Trichinosis: Ind. +1 (1980), W. Va. —1 (1979).

TABLE III. Cases of specified notifiable diseases, United States, weeks ending February 23, 1980, and February 24, 1979 (8th week)

REPORTING AREA	ASEPTIC MENIN- GITIS	BRU- CEL- LOSIS	CHICKEN- POX	DIPHTHERIA		ENCEPHALITIS			HEPATITIS (VIRAL), BY TYPE			MALARIA	
						Primary		Post-in- fectious	B	A	Unspecified		
						1980	1979*	1980	1980	1980	1980		
UNITED STATES	58	2	4,864	-	-	11	14	2	242	433	207	22	175
NEW ENGLAND	3	-	479	-	-	-	-	-	14	2	10	1	14
Maine	1	-	8	-	-	-	-	-	2	-	-	-	-
N.H.	-	-	99	-	-	-	-	-	-	-	-	-	1
Vt.	-	-	2	-	-	-	-	-	2	-	-	-	-
Mass.	-	-	158	-	-	-	-	-	4	-	8	1	10
R.I.	-	-	41	-	-	-	-	-	-	-	-	-	1
Conn.	2	-	171	-	-	-	-	-	6	2	2	-	2
MID. ATLANTIC	5	-	246	-	-	2	3	1	24	27	11	-	22
Upstate N.Y.	2	-	93	-	-	1	2	-	6	8	5	-	1
N.Y. City	1	-	54	-	-	1	1	-	11	3	1	-	12
N.J.†	1	-	NN	-	-	-	-	-	7	16	5	-	4
Pa.	1	-	99	-	-	-	-	1	-	-	-	-	5
E.N. CENTRAL	6	-	2,047	-	-	2	2	-	29	64	11	-	2
Ohio†	-	-	267	-	-	-	2	-	5	11	-	-	1
Ind.†	-	-	111	-	-	-	-	-	10	7	6	-	-
Ill.	1	-	398	-	-	-	-	-	3	14	-	-	-
Mich.	5	-	851	-	-	2	-	-	11	28	4	-	-
Wis.	-	-	420	-	-	-	-	-	-	4	1	-	1
W.N. CENTRAL	5	-	761	-	-	-	-	1	6	15	6	-	5
Minn.	-	-	3	-	-	-	-	-	2	6	-	-	4
Iowa	1	-	299	-	-	-	-	-	1	2	4	-	1
Mo.	-	-	83	-	-	-	-	-	2	-	1	-	-
N. Dak.†	-	-	14	-	-	-	-	-	-	-	-	-	-
S. Dak.	2	-	7	-	-	-	-	-	-	3	-	-	-
Nebr.	-	-	21	-	-	-	-	-	-	1	-	-	-
Kans.	2	-	334	-	-	-	-	1	1	3	1	-	-
S. ATLANTIC	6	-	640	-	-	1	3	-	76	62	26	5	22
Del.	-	-	14	-	-	-	-	-	1	-	-	-	-
Md.	-	-	95	-	-	-	1	-	7	5	6	3	5
D.C.	-	-	4	-	-	-	-	-	5	2	-	-	-
Va.	1	-	7	-	-	-	1	-	3	5	3	1	7
W. Va.	-	-	152	-	-	-	-	-	2	2	-	-	1
N.C.†	-	-	NN	-	-	1	1	-	7	9	10	-	3
S.C.	2	-	23	-	-	-	-	-	25	1	1	-	-
Ge.	-	-	-	-	-	-	-	-	11	11	-	1	1
Fla.	3	-	345	-	-	-	-	-	15	27	6	-	5
E.S. CENTRAL	5	-	104	-	-	2	2	-	27	29	7	-	-
Ky.	2	-	61	-	-	1	-	-	8	6	-	-	-
Tenn.	1	-	NN	-	-	1	-	-	9	11	5	-	-
Ala.	2	-	28	-	-	-	1	-	9	6	2	-	-
Miss.	-	-	15	-	-	-	1	-	1	6	-	-	-
W.S. CENTRAL	14	2	364	-	-	1	2	-	19	85	70	5	22
Ark.	-	1	2	-	-	-	-	-	3	12	2	-	1
La.	-	-	NN	-	-	-	-	-	1	1	3	-	14
Okla.†	2	-	-	-	-	-	-	-	5	13	10	2	3
Tex.	12	1	362	-	-	1	2	-	10	59	55	3	4
MOUNTAIN	1	-	139	-	-	-	1	-	11	62	32	-	9
Mont.	-	-	88	-	-	-	-	-	-	3	2	-	-
Idaho	-	-	3	-	-	-	-	-	-	-	-	-	-
Wyo.	-	-	-	-	-	-	-	-	-	-	1	-	1
Colo.	-	-	47	-	-	-	-	-	2	16	6	-	4
N. Mex.	-	-	-	-	-	-	1	-	-	-	-	-	-
Ariz.	-	-	NN	-	-	-	-	-	6	29	8	-	3
Utah	-	-	1	-	-	-	-	-	1	2	7	-	-
Nev.	1	-	-	-	-	-	-	-	2	12	8	-	1
PACIFIC	13	-	84	-	-	3	1	-	36	87	34	11	79
Wash.†	1	-	72	-	-	-	-	-	1	4	-	-	9
Oreg.	-	-	-	-	-	2	-	-	4	21	4	3	6
Calif.†	9	-	-	-	-	1	1	-	28	62	30	8	63
Alaska	-	-	9	-	-	-	-	-	-	-	-	-	1
Hawaii	3	-	3	-	-	-	-	-	3	-	-	-	-
Guam†	NA	NA	NA	NA	-	NA	-	-	NA	NA	NA	NA	-
P.R.	-	-	7	-	-	-	-	-	-	1	1	-	-
V.I.	-	-	1	-	-	-	-	-	-	-	-	-	-
Pac. Trust Terr.	NA	NA	NA	NA	-	NA	-	-	NA	NA	NA	NA	-

NA: Not notifiable.

NA: Not available.

*Delayed reports received for 1979 are not shown below but are used to update last year's weekly and cumulative totals.

†The following delayed reports will be reflected in next week's cumulative totals: Asep. meng.: Ind. +2, Calif. +15; Chickenpox: Ind. +254, Wash. +1, Calif. +108, Guam 11; Enceph.: N.J. -2, Ohio +1, Ind. +1, Calif. +8; Hep. B: Ind. +8, N. Dak. +1, Calif. +66; Hep. A: Ind. +9, Wash. -3, Calif. +113, Guam +1; Hep. unsp.: Ind. +3, N.C. -1, Okla. +1, Calif. +40, Guam +2; Malaria: Calif. +14.

TABLE III (Cont. 'd). Cases of specified notifiable diseases, United States, weeks ending February 23, 1980, and February 24, 1979 (8th week)

REPORTING AREA	MEASLES (RUBEOLA)			MENINGOCOCCAL INFECTIONS TOTAL			MUMPS		PERTUSSIS	RUBELLA		TETANUS
	1980	CUM. 1980	CUM. 1979*	1980	CUM. 1980	CUM. 1979*	1980	CUM. 1980	1980	1980	CUM. 1980	CUM. 1980
UNITED STATES	165	1,085	1,737	48	414	506	219	1,932	37	103	484	4
NEW ENGLAND	6	72	103	5	16	12	9	245	-	2	38	-
Maine	-	-	-	-	1	-	-	72	-	1	7	-
N.H.	2	43	2	2	2	2	1	2	-	-	14	-
Vt.	4	27	3	-	1	-	-	-	-	-	-	-
Mass.	-	-	-	2	8	6	8	93	-	1	10	-
R.I.	-	1	98	1	1	-	-	8	-	-	-	-
Conn.	-	1	-	-	3	4	-	70	-	-	7	-
MID. ATLANTIC	18	212	80	13	75	76	5	152	-	5	33	1
Upstate N.Y.	15	66	45	3	32	29	1	19	-	4	17	-
N.Y. City	3	51	28	5	18	19	-	18	-	1	10	-
N.J.†	-	14	-	4	17	23	4	34	-	-	2	-
Pa.†	-	81	7	1	8	5	-	81	-	-	4	1
E.N. CENTRAL	37	144	476	3	40	39	80	640	29	22	122	-
Ohio	-	18	2	1	18	12	52	281	-	-	1	-
Ind.†	5	10	33	-	3	12	3	22	-	2	47	-
Ill.	11	28	222	1	3	-	6	78	28	10	13	-
Mich.	17	46	158	1	12	12	6	163	1	7	43	-
Wis.†	4	42	61	-	4	3	13	96	-	3	18	-
W.N. CENTRAL	26	121	233	4	14	15	7	84	-	19	55	1
Minn.	15	84	71	1	6	1	-	3	-	-	4	1
Iowa	-	1	1	1	1	3	1	12	-	1	1	-
Mo.	4	22	152	2	5	9	-	37	-	10	17	-
N. Dak.	-	-	1	-	1	1	2	3	-	2	3	-
S. Dak.	1	3	-	-	1	-	-	7	-	-	-	-
Nebr.	6	11	8	-	-	-	4	22	-	7	30	-
Kans.	-	-	-	-	-	-	-	-	-	-	-	-
S. ATLANTIC	46	315	166	7	100	141	13	221	3	20	61	1
Del.	1	1	-	-	-	2	4	22	-	-	-	-
Md.	-	1	1	-	10	8	2	76	-	-	-	-
D.C.	-	-	-	-	-	-	-	1	-	-	-	-
Va.	20	68	13	-	11	19	1	18	-	1	3	-
W. Va.†	-	2	27	-	2	3	2	23	-	1	5	-
N.C.	-	1	1	2	19	18	2	41	-	2	8	-
S.C.†	-	1	16	1	11	17	-	7	1	11	32	1
Ga.	8	174	2	3	23	25	-	-	1	-	-	-
Fla.	17	67	106	1	24	49	2	33	1	5	13	-
E.S. CENTRAL	7	45	27	6	44	37	76	337	2	3	27	-
Ky.	-	28	7	3	12	10	72	312	2	1	9	-
Tenn.	1	4	3	1	13	12	3	9	-	2	17	-
Ala.	6	12	16	1	13	6	-	6	-	-	1	-
Miss.	-	1	1	1	6	9	1	12	-	-	-	-
W.S. CENTRAL	15	58	182	5	48	88	11	65	1	5	21	-
Ark.	-	1	5	-	2	8	5	10	-	-	1	-
La.	1	6	42	2	14	42	3	7	-	-	1	-
Okla.	-	1	1	-	4	11	-	-	-	-	-	-
Tex.	14	50	134	3	28	27	3	48	1	5	19	-
MOUNTAIN	2	31	51	2	20	27	5	62	-	10	16	-
Mont.	-	-	14	-	1	2	3	19	-	-	-	-
Idaho	-	-	2	1	3	2	-	4	-	-	-	-
Wyo.	-	-	-	-	1	-	-	-	-	-	-	-
Colo.†	-	1	3	1	8	1	2	12	-	-	-	-
N. Mex.	-	-	10	-	-	2	-	-	-	-	-	-
Ariz.	-	10	6	-	4	17	-	9	-	3	4	-
Utah	2	18	13	-	1	2	-	15	-	7	9	-
Nev.	-	2	3	-	2	1	-	3	-	-	3	-
PACIFIC	8	87	419	3	57	71	13	126	2	17	111	1
Wash.	3	18	262	1	11	7	2	37	-	3	13	-
Oreg.	-	-	2	1	6	5	1	25	-	-	9	-
Calif.†	5	67	129	1	40	56	10	59	2	14	88	1
Alaska	-	-	-	-	-	1	-	3	-	-	1	-
Hawaii	-	2	26	-	-	2	-	2	-	-	-	-
Guam †	NA	-	-	-	-	-	NA	-	NA	NA	-	-
P.R.	2	10	23	-	3	-	5	15	-	-	2	1
V.I.	-	-	1	-	-	-	-	-	-	-	-	-
Pac. Trust Terr.	NA	-	3	-	-	1	NA	-	NA	NA	-	-

NA: Not available.

*Delayed reports received for 1979 are not shown below but are used to update last year's weekly and cumulative totals.

†The following delayed reports will be reflected in next week's cumulative totals: Measles: Pa. -8, Ind.+3, Wis. -3, W. Va. +2, S.C. -1, Calif. +13; Men. inf.: N.J. -5 civ. -1 mil., Pa. -2, Ind. +5, W. Va. +1, Calif. +12; Mumps: Pa. +8, Ind. +4, Colo. +1, Calif. +9, Guam +1; Pertussis: Calif. +2; Rubella: N.J. +1, Ind. +14, Calif. +20.

TABLE III (Cont.'d). Cases of specified notifiable diseases, United States, weeks ending
February 23, 1980, and February 24, 1979 (8th week)

REPORTING AREA	TUBERCULOSIS		TULA- REMIA	TYPHOID FEVER		TYPHUS FEVER (Tick-borne) (RMSF)		VENEREAL DISEASES (Civilian)						RABIES (in Animals)
	1980	CUM. 1980	CUM. 1980	1980	CUM. 1980	1980	CUM. 1980	GONORRHEA			SYPHILIS (Pri. & Sec.)			CUM. 1979*
								1980	CUM. 1980	CUM. 1979*	1980	CUM. 1980	CUM. 1979*	
UNITED STATES	497	3,403	12	7	29	-	6	13,974	139,066	145,754	453	3,908	3,674	646
NEW ENGLAND	11	100	-	-	3	-	-	327	4,002	3,957	3	115	73	7
Maine †	3	7	-	-	-	-	-	35	269	263	-	-	1	7
N.H. †	-	2	-	-	-	-	-	8	136	109	-	-	4	-
Vt.	1	4	-	-	-	-	-	12	125	64	-	1	-	-
Mass.	1	37	-	-	2	-	-	103	1,509	1,575	3	67	48	-
R.I.	-	13	-	-	1	-	-	17	220	322	-	2	1	-
Conn.	6	37	-	-	-	-	-	152	1,743	1,624	-	45	19	-
MID. ATLANTIC	101	631	-	3	3	-	1	1,491	15,776	14,559	82	572	556	2
Upstate N.Y.	20	111	-	-	-	-	-	352	2,374	1,723	17	44	33	-
N.Y. City	43	242	-	3	3	-	-	450	6,487	5,735	41	389	386	-
N.J.	21	134	-	-	-	-	-	153	2,853	2,853	17	71	70	2
Pa.	17	144	-	-	-	-	1	536	4,062	4,256	7	68	67	-
E.N. CENTRAL	64	442	1	-	2	-	-	1,693	20,712	22,918	28	249	497	70
Ohio	10	78	-	-	-	-	-	697	6,507	5,980	6	63	95	2
Ind. †	10	50	-	-	-	-	-	112	1,965	1,554	3	33	22	7
Ill.	19	183	-	-	-	-	-	132	4,444	8,027	5	59	307	38
Mich. †	17	98	1	-	2	-	-	571	5,232	5,403	11	81	55	-
Wis. †	8	33	-	-	-	-	-	181	2,564	1,954	3	13	18	23
W.N. CENTRAL	12	116	4	-	-	-	2	663	6,283	6,966	1	39	48	191
Minn.	5	21	1	-	-	-	-	49	1,138	1,242	-	11	19	26
Iowa	-	11	-	-	-	-	-	66	750	938	-	3	4	47
Mo.	3	53	2	-	-	-	2	304	2,477	2,940	1	23	17	57
N. Dak.	-	2	-	-	-	-	-	12	85	106	-	-	-	13
S. Dak.	-	4	-	-	-	-	-	28	219	256	-	-	-	35
Nebr.	-	6	1	-	-	-	-	47	550	416	-	2	-	1
Kans.	4	19	-	-	-	-	-	157	1,064	1,068	-	-	8	12
S. ATLANTIC	133	794	3	4	12	-	3	4,203	35,925	34,871	120	963	918	63
Del.	5	15	-	1	1	-	-	67	559	499	-	3	7	-
Md.	7	100	1	-	2	-	-	366	3,405	4,144	8	75	56	-
D.C.	3	43	-	-	2	-	-	318	2,659	2,033	5	67	64	-
Va. †	8	72	-	-	1	-	-	380	3,060	3,367	8	89	94	-
W. Va.	1	37	-	1	1	-	-	34	415	529	-	3	17	1
N.C. †	31	146	-	1	1	-	2	654	5,646	5,539	4	75	98	-
S.C.	5	61	-	1	1	-	-	366	3,639	2,930	7	38	52	13
Ga.	28	94	2	-	-	-	1	761	6,412	6,414	39	272	227	35
Fla.	45	226	-	-	3	-	-	1,257	10,130	9,416	49	341	303	14
E.S. CENTRAL	70	339	1	-	1	-	-	1,222	11,107	12,959	34	324	271	35
Ky.	12	65	-	-	1	-	-	73	1,717	1,756	-	15	24	17
Tenn.	24	108	1	-	-	-	-	343	4,037	4,566	18	136	128	17
Ala.	19	111	-	-	-	-	-	576	2,888	3,861	3	59	49	1
Miss.	15	55	-	-	-	-	-	230	2,465	2,776	13	114	70	-
W.S. CENTRAL	30	273	-	-	-	-	-	1,864	18,460	20,123	72	745	605	208
Ark.	3	8	-	-	-	-	-	192	1,408	1,618	4	29	19	28
La.	7	79	-	-	-	-	-	386	2,849	3,460	15	161	131	3
Okla.	3	37	-	-	-	-	-	207	1,936	1,739	-	9	8	27
Tex.	17	149	-	-	-	-	-	1,079	12,267	13,306	53	546	447	150
MOUNTAIN	19	133	1	-	1	-	-	668	5,534	5,841	6	82	49	17
Mont. †	2	5	-	-	1	-	-	19	199	335	-	-	3	1
Idaho	1	5	-	-	-	-	-	24	273	255	-	3	3	-
Wyo.	2	9	-	-	-	-	-	19	164	151	-	3	3	-
Colo. †	1	40	-	-	-	-	-	172	1,398	1,547	5	29	20	-
N. Mex.	-	21	-	-	-	-	-	112	829	783	1	13	7	2
Ariz.	13	46	1	-	-	-	-	161	1,373	1,650	-	20	6	14
Utah	-	3	-	-	-	-	-	40	293	277	-	4	-	-
Nev.	-	4	-	-	-	-	-	121	1,005	843	-	10	7	-
PACIFIC	57	575	2	-	7	-	-	1,843	21,267	23,560	107	819	657	53
Wash. †	10	54	-	-	-	-	-	210	1,977	2,140	-	92	38	-
Oreg.	1	37	-	-	-	-	-	196	1,559	1,692	4	16	36	-
Calif. †	46	472	2	-	7	-	-	1,327	16,861	18,590	102	698	574	53
Alaska	-	1	-	-	-	-	-	62	562	739	1	2	2	-
Hawaii	-	11	-	-	-	-	-	48	308	399	-	11	7	-
Guam †	NA	1	-	NA	-	NA	-	NA	-	18	NA	-	-	-
P.R.	3	16	-	-	-	-	-	33	286	260	9	71	81	3
V.I. †	-	-	-	-	-	-	-	4	17	26	1	5	-	-
Pac. Trust Terr.	NA	-	-	NA	-	NA	-	NA	-	64	NA	-	-	-

NA: Not available.

*Delayed reports received for 1979 are not shown below but are used to update last year's weekly and cumulative totals.

†The following delayed reports will be reflected in next week's cumulative totals: TB: N.H. -1, Ind. +10, Va. +8, N.C. -1, Colo. -31, Calif. +61; G.C.: Maine -1 civ. +1 mil., N.H. -1 civ., Ind. +328 civ., Wis. -2 civ., Mont. +3 mil., Wash. +83 mil., Calif. +2544 civ. +86 mil. Guam +12 civ. +4 mil. V.I. +8; Syphilis: Ind. +5, Mich. -1, Calif. +46; An. rabies: Ind. +1, Calif. +7.

TABLE IV. Deaths in 121 U.S. cities,* week ending
February 23, 1980 (8th week)

REPORTING AREA	ALL CAUSES, BY AGE (YEARS)					P & I** TOTAL	REPORTING AREA	ALL CAUSES, BY AGE (YEARS)					P & I** TOTAL
	ALL AGES	>65	45-64	25-44	<1			ALL AGES	>65	45-64	25-44	<1	
NEW ENGLAND	820	562	189	35	20	76	S. ATLANTIC	1,357	838	357	81	45	55
Boston, Mass.	182	111	41	15	10	18	Atlanta, Ga.	151	88	38	14	7	6
Bridgeport, Conn.	49	31	14	2	2	4	Baltimore, Md.	218	132	57	14	7	2
Cambridge, Mass.	28	26	2	-	-	4	Charlottesville, N.C.	64	35	19	3	5	4
Fall River, Mass.	29	22	7	-	-	4	Jacksonville, Fla.	118	78	29	5	4	4
Hartford, Conn.	77	48	19	4	3	2	Miami, Fla.	114	69	34	6	-	4
Lowell, Mass.	50	40	8	1	-	2	Norfolk, Va.	62	39	18	2	2	6
Lynn, Mass.	25	16	7	1	1	3	Richmond, Va.	88	52	25	5	5	6
New Bedford, Mass.	22	18	3	1	-	4	Savannah, Ga.	33	21	7	2	1	2
New Haven, Conn.	61	39	14	3	2	1	St. Petersburg, Fla.	109	95	12	-	1	5
Providence, R.I.	73	43	28	1	1	6	Tampa, Fla.	94	62	17	6	8	5
Somerville, Mass.	18	15	2	1	-	5	Washington, D.C.	246	135	76	22	4	10
Springfield, Mass.	55	38	13	3	1	5	Wilmington, Del.	60	32	25	2	1	1
Westerbury, Conn.	54	44	8	2	-	10							
Worcester, Mass.	97	71	23	1	-	17							
							E.S. CENTRAL	702	422	190	42	21	34
MID. ATLANTIC	3,140	2,127	666	176	79	179	Birmingham, Ala.	132	77	35	8	6	1
Albany, N.Y.	65	48	9	4	3	3	Chattanooga, Tenn.	50	36	7	1	3	3
Allentown, Pa.	28	18	8	1	-	8	Knoxville, Tenn.	63	48	10	2	2	2
Buffalo, N.Y.	134	91	32	7	-	8	Louisville, Ky.	111	66	37	4	2	13
Camden, N.J.	40	27	13	-	-	2	Memphis, Tenn.	138	83	40	11	3	5
Elizabeth, N.J.	43	33	6	2	-	5	Mobile, Ala.	47	19	17	5	2	3
Erie, Pa.	32	21	8	1	-	1	Montgomery, Ala.	58	38	11	4	3	3
Jersey City, N.J.	46	29	13	1	-	1	Nashville, Tenn.	103	55	33	7	2	4
Newark, N.J.	75	42	15	8	3	6							
N.Y. City, N.Y.	1,734	1,195	349	99	45	90	W.S. CENTRAL	1,120	645	298	93	43	46
Paterson, N.J.	22	16	3	2	1	-	Austin, Tex.	48	31	13	3	-	4
Philadelphia, Pa.	346	209	85	24	16	21	Baton Rouge, La.	21	14	6	1	-	1
Pittsburgh, Pa. ††	156	100	39	7	5	8	Corpus Christi, Tex.	25	15	6	1	3	-
Reading, Pa.	32	28	4	-	-	1	Dallas, Tex.	185	100	50	21	10	1
Rochester, N.Y.	113	82	20	5	2	12	El Paso, Tex.	40	28	8	3	-	5
Schenectady, N.Y.	30	18	9	2	-	2	Fort Worth, Tex.	96	56	24	10	3	9
Scranton, Pa. ††	42	31	9	1	1	3	Houston, Tex.	243	120	73	30	6	6
Syracuse, N.Y.	94	69	17	5	3	7	Little Rock, Ark.	69	33	17	7	8	6
Trenton, N.J.	48	28	10	7	-	4	New Orleans, La.	121	66	37	1	7	1
Utica, N.Y.	24	17	6	-	-	2	San Antonio, Tex.	146	101	33	8	1	5
Yonkers, N.Y.	36	25	11	-	-	3	Shreveport, La.	30	19	9	-	2	2
							Tulsa, Okla.	96	62	22	8	3	6
E.N. CENTRAL	2,617	1,682	615	148	93	103	MOUNTAIN	609	372	153	37	22	23
Akron, Ohio	72	44	19	1	3	-	Albuquerque, N. Mex.	60	39	11	6	1	2
Canton, Ohio	52	29	22	-	1	2	Colorado Springs, Colo.	34	25	2	2	2	6
Chicago, Ill.	674	399	174	44	36	18	Denver, Colo.	134	74	41	7	4	4
Cincinnati, Ohio	182	115	52	6	3	18	Las Vegas, Nev.	56	28	20	6	-	1
Cleveland, Ohio	184	110	48	8	9	7	Ogden, Utah	28	22	3	2	1	4
Columbus, Ohio	135	87	31	9	7	7	Phoenix, Ariz.	142	85	38	8	9	1
Dayton, Ohio	132	94	23	9	3	6	Pueblo, Colo.	20	11	6	-	-	2
Detroit, Mich.	280	174	61	29	8	6	Salt Lake City, Utah	41	22	12	2	4	2
Evansville, Ind.	51	35	13	2	1	2	Tucson, Ariz.	94	66	20	4	1	1
Fort Wayne, Ind.	47	34	9	3	1	3							
Gary, Ind.	16	11	2	2	1	2	PACIFIC	1,777	1,188	372	112	55	83
Grand Rapids, Mich.	56	43	8	-	2	3	Berkeley, Calif.	11	8	2	-	-	2
Indianapolis, Ind.	205	142	45	9	7	1	Fresno, Calif.	71	42	16	5	2	5
Madison, Wis.	54	32	14	4	2	9	Glendale, Calif.	36	20	2	-	14	-
Milwaukee, Wis.	154	107	28	12	3	3	Honolulu, Hawaii	59	34	16	7	1	5
Peoria, Ill.	40	30	7	-	1	4	Long Beach, Calif.	79	51	21	5	1	-
Rockford, Ill.	58	40	10	3	3	5	Los Angeles, Calif.	429	293	81	30	15	18
South Bend, Ind.	44	30	11	2	-	4	Oakland, Calif.	100	73	14	8	1	4
Toledo, Ohio	108	72	24	3	1	2	Pasadena, Calif.	23	17	3	-	1	1
Youngstown, Ohio	73	54	14	2	1	1	Portland, Ore.	145	104	26	8	4	4
							Sacramento, Calif.	61	41	15	1	1	2
W.N. CENTRAL	836	569	178	36	27	52	San Diego, Calif.	132	79	37	8	2	3
Des Moines, Iowa	59	44	12	-	2	4	San Francisco, Calif.	182	129	35	14	2	5
Duluth, Minn.	18	11	5	2	-	2	San Jose, Calif.	173	114	36	13	4	7
Kansas City, Kans.	45	28	11	3	1	-	Seattle, Wash.	174	113	46	11	1	14
Kansas City, Mo.	124	81	26	8	1	4	Spokane, Wash.	49	37	6	1	3	7
Lincoln, Nebr.	32	27	2	-	2	2	Tacoma, Wash.	53	33	16	1	3	6
Minneapolis, Minn.	100	71	19	3	4	6							
Omaha, Nebr.	67	44	12	4	4	4							
St. Louis, Mo.	196	129	51	8	5	11							
St. Paul, Minn.	90	63	18	2	5	3							
Wichita, Kans.	105	71	22	6	3	16	TOTAL	12,978	8,405	3,018	760	405	651

*Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

**Pneumonia and influenza

†Because of changes in reporting methods in these 4 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

††Figures are not available this week. Estimates are based on average percent of regional totals.

Mumps Vaccine — Continued

Since there is no evidence that persons who have previously either received the vaccine or had mumps are at enhanced risk from receiving live mumps vaccine, testing for susceptibility before vaccination is unnecessary. Furthermore, such testing is usually either unreliable (mumps skin test) or non-specific (complement-fixation antibody test). Those tests which are reliable (neutralization, ELISA, and radial hemolysis antibody tests) are not readily available.

Dosage: A single dose of vaccine in the volume specified by the manufacturer should be administered subcutaneously.

Age: Live mumps virus vaccine is recommended for all children at any age after 12 months. It should not be administered to younger infants because persisting maternal antibody may interfere with seroconversion. The vaccine may be administered either by itself or in combination with measles and/or rubella vaccines. The combined vaccine is preferred for routine use in young children because of convenience and economy. When given in a combined vaccine that includes measles antigen, it should be administered when a child is about 15 months of age to achieve the maximum rate of measles seroconversion. Mumps vaccine can be of particular value for children approaching puberty and for adolescents and adults, especially males, who have not had mumps.

Use of Vaccine Following Exposure

When given after exposure to mumps, live mumps vaccine may not provide protection. However, if the exposure did not result in infection, the vaccine should induce protection against subsequent infection.

Neither mumps immune globulin nor immune serum globulin (ISG) has been of established value in postexposure prophylaxis, and neither is recommended.

PRECAUTIONS AND CONTRAINDICATIONS

Pregnancy

Although mumps virus is capable of infecting the placenta and fetus, there is no good evidence that it causes congenital malformations in humans. Mumps vaccine virus also has been shown to infect the placenta, but the virus has not been isolated from the fetal tissues from susceptible women who were vaccinated and underwent elective abortions. However, because of the theoretical risk of fetal damage, it is prudent to avoid vaccinating pregnant women.

Allergies

Live mumps vaccine is produced in chick-embryo cell culture. It has not been reported to be associated with allergic reactions, and there is no evidence to indicate it should not be given to persons with allergies to eggs, chickens, and feathers. Some vaccines contain trace amounts of antibiotics to which patients may be allergic. Those administering vaccines should review the label information carefully before deciding whether patients with known allergies to such antibiotics can be vaccinated safely. Live mumps virus vaccine does not contain penicillin.

Recent Administration of Immune Serum Globulin

Passively acquired antibody can interfere with the response to live, attenuated-virus vaccines. Therefore, administration of mumps vaccine should be deferred until approximately 3 months after passive immunization.

Immune Deficiency Conditions

Live mumps virus vaccine should not be given to persons with severe febrile illness; those with congenital immunodeficiency; those with leukemia, lymphoma, or generalized malignancy; or those receiving immunosuppressive therapy.

*Mumps Vaccine — Continued***Other**

There is no proven association between mumps vaccination and pancreatic damage or subsequent development of diabetes mellitus.

SURVEILLANCE

There is a continuing need to improve the reporting of mumps cases and mumps complications and to document the duration of vaccine effectiveness. Continuous and careful review of adverse reactions is also important. All severe reactions in vaccinated individuals should be evaluated and reported in detail to local or state health officials and to the manufacturer.

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Replaces previous recommendation on this subject, published in *MMWR* 1977;26:393-4.

Reprints of this article will be available upon request in approximately 8 weeks from Public Inquiries, Room 1/B63, Center for Disease Control, Atlanta, Georgia 30333.

Erratum, Vol. 29, No. 4

p48 The editorial note to the article "Waterborne Disease Outbreaks in the United States — 1978," indicated that a parvovirus-like agent was first implicated as a cause of an acute waterborne gastroenteritis outbreak in 1978. In fact, a parvovirus-like agent serologically unrelated to the Norwalk agent was responsible for a waterborne outbreak in 1976 (1). The statement should have indicated that 1978 was the first year in which a Norwalk-like agent was found to be responsible for a waterborne outbreak.

Reference

1. Morens DM, Zweighaft RM, Vernon TM, et al. A waterborne outbreak of gastroenteritis with secondary person-to-person spread: association with a viral agent. *Lancet* 1979;1:964-6.

*Current Trends***Tuberculosis — United States, 1979**

In 1979, 27,817 tuberculosis cases were reported to CDC. This figure, considered a provisional total until final corrected data for 1979 are received by the Tuberculosis Control Division, represents a decrease of 4.9% (1,436 cases) from the 1978 provisional total. The provisional case rate of 12.6 per 100,000 is 6.0% less than in 1978.

Tuberculosis - Continued

Since 1972, the provisional total has been based on reports submitted weekly by the states. For the period 1972 through 1978, the final count averaged 333 cases less than the provisional count. Therefore, the final number of cases and the case rate in 1979 are expected to be slightly less than the provisional number and rate.

The geographic distribution of cases during the past 3 years has varied little (Table 1). In 1979, the provisional number of cases and case rates increased in Regions VII and IX.

Reported by the Tuberculosis Control Div, Bur of State Services, CDC.

TABLE 1. Provisional tuberculosis cases and case rates by region, United States, 1977-1979

HEW Region	1977		1978		1979	
	Number of cases	Case rate	Number of cases	Case rate	Number of cases	Case rate
United States	30,005	13.9	29,253	13.4	27,817	12.6
Region I (Conn., Maine, Mass., N.H.,R.I.,Vt.)	1,113	9.1	984	8.0	859	7.0
Region II (N.J., N.Y.)	3,547	14.0	3,218	12.8	3,135	12.6
Region III (Del.,D.C.,Md.,Pa., Va.,W.Va.)	3,569	14.8	3,539	14.6	3,207	13.3
Region IV (Ala.,Fla.,Ga.,Ky., Miss.,N.C.,S.C.,Tenn.)	7,038	19.7	6,886	19.0	6,635	18.1
Region V (Ill.,Ind.,Mich.,Minn., Ohio, Wis.)	4,924	10.9	4,906	10.8	4,273	9.4
Region VI (Ark.,La.,N.Mex.,Okla., Tex.)	3,680	16.1	3,625	15.6	3,459	14.6
Region VII (Iowa, Kans.,Mo.,Nebr.)	756	6.5	682	5.8	718	6.1
Region VIII (Colo.,Mont.,N.Dak., S.Dak.,Utah, Wyo.)	315	4.9	336	5.1	311	4.6
Region IX (Ariz.,Calif.,Hawaii, Nev.)	4,480	17.4	4,470	17.1	4,632	17.3
Region X (Alaska, Idaho, Oreg.,Wash.)	583	8.0	607	8.1	588	7.6

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The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Send reports to: Center for Disease Control, Attn: Editor, Morbidity and Mortality Weekly Report, Atlanta, Georgia 30333.

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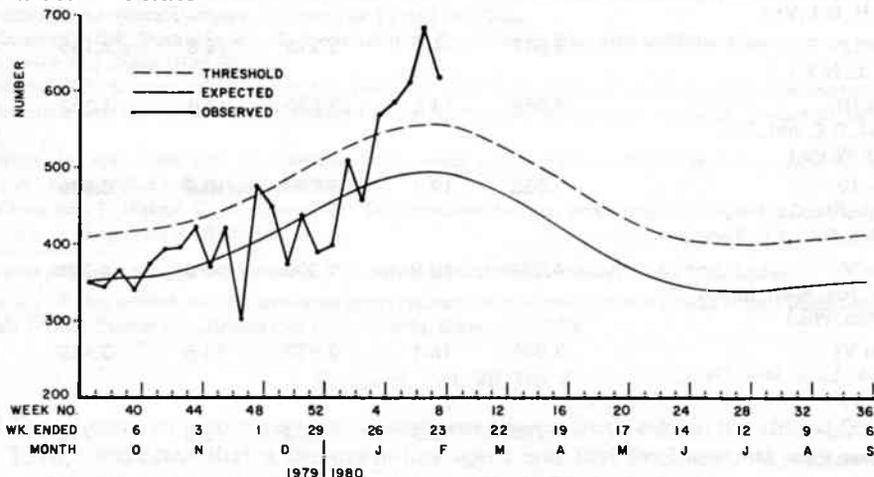
Influenza – United States

For the period February 10-16, 1980, CDC's telephone reporting system, used to determine the extent of influenza-like illness in the nation, indicated that 9 states and New York City were having widespread influenza-like activity. These 9 states were Connecticut, Iowa, Maine, Minnesota, Nebraska, New Hampshire, Oregon, Rhode Island, and South Dakota. Eight other states—California, Illinois, Massachusetts, Michigan, New York, Pennsylvania, Texas, and Utah—were reporting regional outbreaks, and 24 states reported having sporadic cases of influenza-like illness.

Although there was a marked decrease in the number of pneumonia and influenza (P&I) deaths reported from 117 U.S. cities, this total remained above the epidemic threshold for the fifth consecutive week (Figure 1). During the week ending February 23, P&I deaths were elevated in 3 regions of the country. These deaths were primarily in the ≥65-year age group.

Reported by participating State Epidemiologists; Immunization Div, Bur of State Services, and Consolidated Surveillance and Communications Activity, Bur of Epidemiology, CDC.

FIGURE 1. Observed and expected number of deaths attributed to pneumonia and influenza in 117 U.S. cities



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